

## **REMARKS**

In response to the rejections detailed below, Applicants consider the cited reference distinguishable without amending the claims. Accordingly, Applicants have not amended any claims in this response. Claims 1-17 remain pending.

In the Office Action, the Examiner rejected claims 1-17 under 35 U.S.C. § 102(e) as being anticipated by Eguchi et al. (U.S. Patent Application No. 2005/0006674) ("Eguchi").<sup>1</sup>

### **Regarding the Rejection of Claims 1-17 under 35 U.S.C. § 102(e):**

Applicants respectfully traverse the Examiner's rejection of claims 1-17 as anticipated by Eguchi. In order to properly establish that Eguchi anticipates Applicants' claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Regarding the 35 U.S.C. § 102(e) rejection, Eguchi does not disclose each and every element of Applicants' presently claimed invention.

Independent claim 1, recites a combination including, for example, "exposing the semiconductor substrate to an atmosphere containing an oxidant to form a silicon dioxide film *at the interface between the semiconductor substrate and the film containing metal elements and silicon elements*" (emphasis added). Eguchi fails to

---

<sup>1</sup> The Office Action contains statements characterizing the related art and the claims. Regardless of whether any such statements are specifically identified herein, Applicants decline to automatically subscribe to any statements in the Office Action.

disclose at least this quoted subject matter. Specifically, Eguchi teaches a method wherein an “amorphous silicon film 12 containing Zr is oxidized by O<sub>2</sub> plasma oxidation ... thereby forming a Zr silicate film (a silicon oxide film containing Zr) 13.” Paragraph 44. The Examiner appears to allege that Eguchi's silicon film 12 containing Zr and silicon dioxide film 13 correspond to Applicants’ “film containing metal elements and silicon elements” and “silicon dioxide film,” respectively. Even accepting the Examiner’s characterization (and Applicants do not), Eguchi fails to anticipate claim 1 because the silicon dioxide film 13 is not formed “*at the interface between the semiconductor and the*” silicon film 12, as required by claim 1 (emphasis added). Accordingly, Eguchi does not disclose each and every element of claim 1. Claims 2-16 depend from claim 1 and incorporate all of its limitations. Claims 2-16, therefore, are not anticipated by Eguchi for at least this same reason.

Similarly, independent claim 17, recites a combination including, for example, “exposing the semiconductor substrate to an atmosphere containing an oxidant to form a silicon dioxide film *at the interface between the semiconductor substrate and the film containing metal elements and silicon elements*” (emphasis added). Eguchi fails to disclose at least this quoted subject matter. For at least the same reason described above, Eguchi does not disclose each and every element of claim 17. Thus, claims 1-17 are allowable.

**Additional Comments:**

The Examiner appears to consider the silicon dioxide film 13 of Eguchi as corresponding to the silicon dioxide film in the above-recited feature of claim 1. However, these films do not correspond to each other. More specifically, the silicon

dioxide film of claim 1 is "at the interface between the semiconductor substrate and the film containing metal elements and silicon elements". An example of the silicon dioxide film in the above-recited feature of claim 1 is film 3 as shown in FIG. 2 of the present application. On the other hand, the silicon dioxide film 13 of Eguchi is formed merely on the silicon substrate 11 (FIG. 3C), and it is not formed at an "interface between the semiconductor substrate and a film containing metal elements and silicon elements," as required by claim 1. In fact, no film containing metal elements and silicon elements is formed over the silicon dioxide film 13 formed on the silicon substrate 11 of Eguchi (FIG. 3C). Accordingly, contrary to the Examiner's position, it is clear that the silicon dioxide film 13 of Eguchi does not correspond to the silicon dioxide film of claim 1.

In sum, claim 1, and claims 2-16 ultimately dependent from claim 1, are not anticipated by Eguchi. For the same reasons, claim 17 is not anticipated by Eguchi.

**Conclusion:**

Applicants respectfully request reconsideration of the application and withdrawal of the above detailed rejections. Applicants submit that pending claims 1-17 are in condition for allowance, and Applicants request a favorable action.

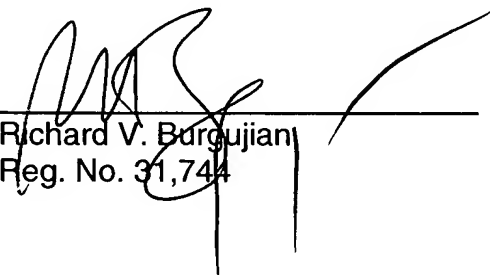
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: January 6, 2006

By: \_\_\_\_\_

  
Richard V. Burgujian  
Reg. No. 31,744